What is claimed is:

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1. A method of fabricating a semiconductor device comprising the steps of:

forming a first crystalline region by irradiating a laser beam to an amorphous semiconductor film while relatively moving the laser beam with respect to said amorphous semiconductor film; and

forming a second crystalline region by irradiating the laser beam to a region including a portion of the first crystalline region of the amorphous semiconductor film formed with the first crystalline region by relatively moving the laser beam with respect to said region including a portion of the first crystalline region;

wherein a wavelength of the laser beam falls in a range of 370 nm through 650 nm.

2. A method of fabricating a semiconductor device comprising the steps of:

forming a first crystalline region by irradiating a laser beam having a shape at an irradiated face or a vicinity thereof in a linear or a rectangular shape to an amorphous semiconductor film while relatively moving the laser beam with respect to said amorphous semiconductor film; and

forming a second crystalline region by irradiating the laser beam to a region including a portion of the first

crystalline region of the amorphous semiconductor film formed with the first crystalline region while relatively moving the laser beam with respect to said region including a portion of the first crystalline region;

wherein a wavelength of the laser beam falls in a range of 370 nm through 650 nm.

3. A method of fabricating a semiconductor device comprising the steps of:

forming a first crystalline region by irradiating a laser beam having a shape at an irradiated face or a vicinity thereof in a linear or rectangular shape to an amorphous semiconductor film while relatively moving the laser beam in a short direction of the laser beam with respect to said amorphous semiconductor film; and

forming a second crystalline region by irradiating the laser beam to a region including a portion of the first crystalline region of the amorphous semiconductor film formed with the first crystalline region while relatively moving the laser beam in the short direction of the laser beam with respect to said region including a portion of the first crystalline region;

wherein a wavelength of the laser beam falls in a range of 370 nm through 650 nm.

4. A method of fabricating a semiconductor device comprising:

a first step of forming a first crystalline semiconductor film by partially crystallizing an amorphous semiconductor film by a heating treatment; and

a second step of forming a second crystalline semiconductor film by irradiating a laser beam to the crystalline semiconductor film;

wherein the second step comprises the steps of:

forming a first crystalline region by irradiating the laser beam to the first crystalline semiconductor film while relatively moving the laser beam with respect to the first crystalline semiconductor film; and

forming a second crystalline region by irradiating the laser beam to a region including a portion of the first crystalline region of the first crystalline semiconductor film formed with the first crystalline region while relatively moving the laser beam with respect to said region including a portion of the first crystalline region of the first crystalline semiconductor film; and

wherein a wavelength of the laser beam falls in a range of 370 nm through 650 nm.

5. A method of fabricating a semiconductor device comprising:

a first step of forming a first crystalline semiconductor film by partially crystallizing an amorphous semiconductor film by a heating treatment; and

a second step of forming a second crystalline semiconductor film by irradiating a laser beam having a shape at an irradiated face or a vicinity thereof in a linear or a rectangular shape to the first crystalline semiconductor film;

wherein the second step comprises the steps of:

forming a first crystalline region by irradiating the laser beam to the first crystalline semiconductor film by relatively moving the laser beam with respect to the first crystalline semiconductor film; and

forming a second crystalline region to a region including a portion of the crystalline region of the first crystalline semiconductor film formed with the first crystalline region by relatively moving the laser beam with respect to said region including a portion of the crystalline region of the first crystalline semiconductor film; and

wherein a wavelength of the laser beam falls in a range of 370 nm through 650 nm.

6. A method of fabricating a semiconductor device comprising:

a first step of forming a first crystalline semiconductor film by partially crystallizing an amorphous semiconductor film

by a heating treatment; and

a second step of forming a second crystalline semiconductor film by irradiating a laser beam having a shape at an irradiated face or a vicinity thereof in a linear or a rectangular shape to the first crystalline semiconductor film while relatively moving the laser beam in a short direction of the laser beam with respect to the first crystalline semiconductor film;

wherein the second step comprises the steps of:

forming a first crystalline region by irradiating the laser beam to the first crystalline semiconductor film while relatively moving the laser beam in the short direction of the laser beam with respect to the first crystalline semiconductor film; and

forming a second crystalline region by irradiating the laser beam to a region including a portion of the first crystalline region of the first crystalline semiconductor film formed with the first crystalline region while relatively moving the laser beam in the short direction of the laser beam with respect to the region including a portion of the first crystalline region of the first crystalline semiconductor film; and

wherein a wavelength of the laser beam falls in a range of 370 nm through 650 nm.

7. The method of fabricating a semiconductor device according to claim 1, wherein a crystalline performance of the first crystalline region, a crystalline performance of the second crystalline region and a crystalline performance of a region overlapped with the first crystalline region and the second crystalline region are the same.

8. The method of fabricating a semiconductor device according to claim 2, wherein a crystalline performance of the first crystalline region, a crystalline performance of the second crystalline region and a crystalline performance of a region overlapped with the first crystalline region and the second crystalline region are the same.

9. The method of fabricating a semiconductor device according to claim 3, wherein a crystalline performance of the first crystalline region, a crystalline performance of the second crystalline region and a crystalline performance of a region overlapped with the first crystalline region and the second crystalline region are the same.

10. The method of fabricating a semiconductor device according to claim 4, wherein a crystalline performance of the first crystalline region, a crystalline performance of the second crystalline region and a crystalline performance of a

region overlapped with the first crystalline region and the second crystalline region are the same.

11. The method of fabricating a semiconductor device according to claim 5, wherein a crystalline performance of the first crystalline region, a crystalline performance of the second crystalline region and a crystalline performance of a region overlapped with the first crystalline region and the second crystalline region are the same.

12. The method of fabricating a semiconductor device according to claim 6, wherein a crystalline performance of the first crystalline region, a crystalline performance of the second crystalline region and a crystalline performance of a region overlapped with the first crystalline region and the second crystalline region are the same.

13. The method of fabricating a semiconductor apparatus according to claim 1, wherein the semiconductor device is a liquid crystal display apparatus or an EL display apparatus.

14. The method of fabricating a semiconductor apparatus according to claim 2, wherein the semiconductor device is a liquid crystal display apparatus or an EL display apparatus.

15. The method of fabricating a semiconductor apparatus according to claim 3, wherein the semiconductor device is a liquid crystal display apparatus or an EL display apparatus.

16. The method of fabricating a semiconductor apparatus according to claim 4, wherein the semiconductor device is a liquid crystal display apparatus or an EL display apparatus.

17. The method of fabricating a semiconductor apparatus according to claim 5, wherein the semiconductor device is a liquid crystal display apparatus or an EL display apparatus.

18. The method of fabricating a semiconductor apparatus according to claim 6, wherein the semiconductor device is a liquid crystal display apparatus or an EL display apparatus.

19. The method of fabricating a semiconductor device according to Claim 1, wherein the semiconductor device is a device selected from the group consisting of: a portable telephone, a video camera, a digital camera, a projector, a goggle type display, a personal computer, a DVD player, an electronic book and a portable information terminal.

20. The method of fabricating a semiconductor device according to claim 2, wherein the semiconductor device is a

device selected from the group consisting of: a portable telephone, a video camera, a digital camera, a projector, a goggle type display, a personal computer, a DVD player, an electronic book and a portable information terminal.

21. The method of fabricating a semiconductor device according to claim 3, wherein the semiconductor device is a device selected from the group consisting of: a portable telephone, a video camera, a digital camera, a projector, a goggle type display, a personal computer, a DVD player, an electronic book and a portable information terminal.

22. The method of fabricating a semiconductor device according to claim 4, wherein the semiconductor device is a device selected from the group consisting of: a portable telephone, a video camera, a digital camera, a projector, a goggle type display, a personal computer, a DVD player, an electronic book and a portable information terminal.

23. The method of fabricating a semiconductor device according to claim 5, wherein the semiconductor device is a device selected from the group consisting of: a portable telephone, a video camera, a digital camera, a projector, a goggle type display, a personal computer, a DVD player, an electronic book and a portable information terminal.

24. The method of fabricating a semiconductor device according to claim 6, wherein the semiconductor device is a device selected from the group consisting of: a portable telephone, a video camera, a digital camera, a projector, a goggle type display, a personal computer, a DVD player, an electronic book and a portable information terminal.

25. The method of fabricating a semiconductor device according to claim 1, wherein said laser beam is a laser beam selected from the group consisting of: a second harmonic of a YAG laser, a second harmonic of a YVO_4 laser and a second harmonic of a YLF laser.

26. The method of fabricating a semiconductor device according to claim 2, wherein said laser beam is a laser beam selected from the group consisting of: a second harmonic of a YAG laser, a second harmonic of a YVO_4 laser and a second harmonic of a YLF laser.

27. The method of fabricating a semiconductor device according to claim 3, wherein said laser beam is a laser beam selected from the group consisting of: a second harmonic of a YAG laser, a second harmonic of a YVO_4 laser and a second harmonic of a YLF laser.

28. The method of fabricating a semiconductor device according to claim 4, wherein said laser beam is a laser beam selected from the group consisting of: a second harmonic of a YAG laser, a second harmonic of a YVO_4 laser and a second harmonic of a YLF laser.

29. The method of fabricating a semiconductor device according to claim 5, wherein said laser beam is a laser beam selected from the group consisting of: a second harmonic of a YAG laser, a second harmonic of a YVO_4 laser and a second harmonic of a YLF laser.

30. The method of fabricating a semiconductor device according to claim 6, wherein said laser beam is a laser beam selected from the group consisting of: a second harmonic of a YAG laser, a second harmonic of a YVO_4 laser and a second harmonic of a YLF laser.